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## APPLICATION FOR LETTERS PATENT OF THE UNITED STATES

### SPECIFICATION

To all whom it may concern:

Be It Known, That we, **Monty Gatehouse, Hendrik J. Schipper** and **Ian P. Buxton**, of Basingstoke, Hampshire, 1815 EC Alkmaar, The Netherlands and Potters Bar, Herts, respectively, have invented certain new and useful improvements in **MEANS FOR AND METHOD OF DISPLAYING A VISUAL DECISION TREE MODEL**, of which we declare the following to be a full, clear and exact description:

## **MEANS FOR AND METHOD OF DISPLAYING A VISUAL DECISION TREE MODEL**

### **BACKGROUND OF THE INVENTION**

The present invention relates to a means for and method of displaying a visual Decision tree model.

- 10 A decision tree is a logical pathway of steps involved in considering the input necessary to make a decision. Often information necessary to make a truly informed decision will come from a host of different people from different commercial disciplines. Some information may come from within and some from outside of a company.
- 15 The decision tree model (which is created by a graphical-based or symbol-based tool) is a very effective way to present and communicate the resulting deliverable. Decision trees can be modelled using tools such as the METIS Object Oriented Visual Modelling tool, sold by Computas Ltd.
- 20 Clearly, in real commercial decision making the options available can be numerous. Consequently, a decision tree can become extremely complex very quickly. This can make the use of such systems less intuitive and consequently less useful in the decision making process.
- 25 The present invention addresses this problem and in particular aids a user to cope with the complexity of decision taking found in today's distributed and ever increasingly global organisations. The means and method in accordance with the present invention also enables managers to communicate, distribute and share then-decision taking across the Internet.

## **SUMMARY OF THE INVENTION**

According to a first aspect of the present invention there is provided a computer implemented means for displaying a visual Decision tree model in a symbol based  
5 table the visual decision tree model including a plurality of visual objects each of the visual objects being linked to at least one other object to form a decision tree, characterised in that after the initial object the tree displays only visual objects which depend from objects which have been selected by a user.

10 According to a second aspect of the present invention there is provided a computer implemented method of displaying a visual architecture model in a symbol based table, the visual architecture model including a plurality of visual objects each of the visual objects being linked to at least one other object to form a decision tree,  
15 characterised in that after the initial object the tree displays only visual objects which depend from objects which have been selected by a user.

The decision tree model gradually exposes to the user the step by step decisions to be taken at each level in the tree. Furthermore the model assists in the decision making process by prompting the users with issues to be considered and questions to be  
20 answered at each level within the structure. Having made this selection the model then identifies the Cost Risks and Work involved resulting from the decisions taken.

The Decision Tree Methodology is a commonly used management technique and it is not this methodology but its application within a visual-modelling tool that is new and  
25 unique

Preferably, decision based information is provided to the user through browser buttons at each Level within the tree

30 Most preferably the information includes concepts which the user should consider prior to making the decision.

Alternatively, the information includes questions, which the user should ask prior to making the decision.

- 5 Still further the information includes answers to those questions which have been put forward by other users.

Preferably, once the final object in the tree is presented consequences of that choice are presented to the user.

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Most preferably, the consequences include cost implications of the choice.

Alternatively, the consequences include workload implications of the choice.

- 15 Alternatively, the consequences include risk analysis of the choice.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

- 20 An embodiment of the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 illustrates a user interface display, displaying a first decision tree in accordance with the present invention;

Figure 2 illustrates a user interface display, displaying a second decision tree in accordance with the present invention; and

- 25 Figure 3 illustrates the user interface of Figures 1 and 2 displaying a list of CONSIDERATIONS to be thought about before making a considered choice.

- Figure 1, illustrates a user interface display 10 of an object oriented visual modelling tool, such as the METIS tool provided by Computas Ltd, operating in accordance  
30 with the present invention.

The display 10 indicates a decision tree 12, which is being utilised to formulate decisions regarding the introduction of the Euro currency by a financial institution. The tree 12 includes a plurality of visual objects 14 each of which are linked to at least one other object 14 to form the decision tree 12. After the initial object 14A the  
 5 tree 12 displays only visual objects 14 which depend from objects 14B, which have been selected by a user. As the user works through the tree the branches of the tree which would depend from objects 14, which have not been selected are not shown. This leads away from the trend in the field in which as much information as possible is provided to a user in order to make decisions. Instead a gradual release of  
 10 information is used in the method and means in accordance with the present invention.

At this stage the viewer should note that the current decision tree if and when fully Displayed has 32 paths in all. However, only the selected path is shown.

15 Information is provided to the user through browser buttons 16 once the user has been provided with a choice between, at least, two options. In the present embodiment the considerations in question are detailed in Figure 3 and include:-

20 Consider any relevant. National Central Bank directives or policies;  
 Consider your business requirements;  
 Consider the Automated Teller Machine (ATM) utilisation pattern for the market in question;  
 Consider available resources;

25 Consider the level of customer availability requirements;  
 Consider switch networking interface requirements;  
 Consider other networking interface requirements; and  
 Consider front loading prior to E-moment .

30 Accordingly, if a user is faced with the question "Big Bang or phased deployment" he or she should consider the relevant topics above including the national Central

Bank directives and our resources t meet the choice made. In the example illustrated in figure I "Big Bang" was selected. This means a rapid deployment. However, a slow deployment may be appropriate in other territories or markets.

- 5 Alternatively or additionally, the information may include questions, which the user should ask prior to making the decision. For simplicity no such questions are illustrated. However, they may include questions, which help with the aforementioned considerations in order to focus all user's minds on the same topics, so that each user makes decisions based on the same criteria. Answers to those
- 10 questions, which have been put forward by other users, may also be available to a user to assist in the decision making process.

- Thus a user will work his or her way through the tree until they come to a final object. Once the final object in the tree is presented consequences of that choice may
- 15 be presented to the user. For example, the user may be informed of cost implications of the choice. Alternatively or additionally, the uses may be informed of workload implications of the choice. This will assist in personnel management issues resulting from the choice. Alternatively or additionally, a risk analysis of the choice may be provided.

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While the invention has been illustrated and described in detail in the drawing and foregoing description, it should be understood that the invention may be implemented through alternative embodiments within the scope of the present invention.